

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A machine for conveying a carton including a lid having at least one flap along a path, comprising:

an overhead conveyor including at least one first lug selectively movable to a depending position for engaging and conveying the carton in a first direction along the path;

a takeaway conveyor ~~adjacent to the overhead conveyor including conveying~~ at least one second lug selectively movable to an upstanding position for engaging and conveying the carton in a second direction along the path, said second direction being generally perpendicular to the first direction; and

means for folding the at least one flap while the carton is conveyed along the path ~~by the overhead conveyor or the takeaway conveyor.~~

2. (Currently Amended) The machine according to claim 1, wherein the first lug moves is pivotally mounted to a conveyor chain for moving between a retracted position overlying the conveying path and the depending position.

3. (Currently Amended) The machine according to claim 1, wherein the takeaway conveyor includes a pair of generally parallel conveyor chains, each including at least one second lug, wherein each at least one second lug is pivotally mounted to the corresponding conveyor chain.

4. (Original) The machine according to claim 3, wherein each second lug is a pop-up lug movable between a retracted position below the conveying path and an upstanding position.

5. (Currently Amended) The machine according to claim 1, further including a rotatable wheel having at least one radially extending projection for at least partially closing

the first flap before or during the engagement of the carton by the depending lug of the overhead conveyor.

6. (Currently Amended) The machine according to claim 1, wherein the means for folding the at least one flap includes a first stationary plow ~~positioned along the overhead conveyor~~ and at least one roller wheel for completing the folding in association with the plow.

7.-8. (Cancelled)

9. (Original) The machine according to claim 1, further including means for applying or activating an adhesive for sealing the at least one flap.

10. (Withdrawn - Amended) A machine for conveying a carton and at least partially folding a flap associated with a trailing end of the carton, comprising:

a rotatable wheel having at least one radially extending projection for engaging and at least partially folding the flap; ~~and~~

an overhead conveyor including at least one lug selectively movable to a depending position for engaging the trailing end of the carton once the flap is at least partially folded by the projection and conveying the carton in a conveying direction,

a takeaway conveyor adjacent to the overhead conveyor conveying at least one second lug selectively movable to a position for engaging and conveying the carton in a second direction along the path, said second direction being generally perpendicular to the first direction; and

means for folding the at least one flap while the carton is conveyed along the path by the takeaway conveyor;

whereby the partial folding by the wheel helps to prevent the flap from being

damaged by the depending lug.

11. (Withdrawn) The machine according to claim 10, wherein the overhead conveyor includes a pair of parallel conveyor chains, each carrying a plurality of lugs independently and selectively movable to the depending position.

12. (Withdrawn) The machine according to claim 11, wherein the plurality of lugs associated with each chain overlap with each other in the conveying direction.

13. (Withdrawn) The machine according to claim 10, wherein the rotatable wheel includes a plurality of radially-extending projections.

14. (Withdrawn) The machine according to claim 10, further including a sensor for sensing the location of the carton and generating a signal used to actuate the wheel to rotate and move the projection into engagement with the flap.

15. (Withdrawn) The machine according to claim 10, further including a support surface along which the carton is conveyed by the overhead conveyor.

16.-18. (Cancelled)

19. (Withdrawn) The machine according to claim 10, further including an infeed conveyor for feeding randomly received cartons to the overhead conveyor at a substantially constant speed.

20.-95. (Cancelled)

96. (New) A machine for conveying a carton including a lid having at least one flap along a path in a generally horizontal plane, comprising:

an overhead conveyor including a first chain carrying at least one first lug selectively movable from a retracted position to a depending position for engaging and conveying the carton in a first direction along the path in the horizontal plane;

a first actuator for assisting in moving the first lug from the retracted position to the depending position;

a takeaway conveyor including a second chain carrying at least one second lug selectively movable from a retracted position to an upstanding position for engaging and conveying the carton in a second direction along the path in the horizontal plane, said second direction being generally perpendicular to the first direction;

a second actuator for assisting in moving the second lug from the retracted position to the upstanding position; and

a folder for folding the at least one flap while the carton is conveyed along the path.

97. (New) The machine according to claim 96, wherein the first lug moves between a retracted position overlying the conveying path and the depending position.

98. (New) The machine according to claim 96, wherein the takeaway conveyor includes a pair of generally parallel conveyor chains, each including at least one second lug.

99. (New) The machine according to claim 98, wherein each second lug is a pop-up lug movable between a retracted position below the conveying path and an upstanding position.

100. (New) The machine according to claim 96, further including a rotatable wheel

having at least one projection for at least partially closing the first flap before or during the engagement of the carton by the depending lug of the overhead conveyor.

101. (New) The machine according to claim 96, wherein the folder for folding the at least one flap includes a first stationary plow positioned along the overhead conveyor and at least one roller wheel for completing the folding in association with the plow.

102. (New) The machine according to claim 101, wherein the carton includes first, second, and third flaps, and further including a folder for folding each of the second and third flaps along the takeaway conveyor.

103. (New) The machine according to claim 102, wherein the folder comprises a stationary plow for associated with each of the second and third flaps and at least one roller wheel for completing the folding of each of the second and third flaps in association with the corresponding plow.

104. (New) The machine according to claim 96, further including a sealer for sealing the at least one flap once folded.

105. (New) The machine according to claim 96, wherein a portion of the overhead conveyor overlies a portion of the takeaway conveyor.

106. (New) The machine according to claim 1, wherein a portion of the overhead conveyor overlies a portion of the takeaway conveyor.